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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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KATTEN MUCHIN ZAVIS ROSENMAN			DANIEL JR, WILLIE J	
575 MADISON AVENUE			ART UNIT	
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2686

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Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 09/900,332	Applicant(s) YASUI ET AL.	
	Examiner Willie J. Daniel, Jr.	Art Unit 2686	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 08 July 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Specification*

1. The objections to the specification are withdrawn, as the proposed specification corrections are approved.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

**Claims 1-5 and 8-9** are rejected under 35 U.S.C. 102(e) as being anticipated by Fan et al. (hereinafter Fan) (US 6,529,159 B1).

Regarding **Claim 1**, Fan discloses a server system (Figure 1) for distributing information to portable mobile information terminals (1, 3) in a specific area, comprising:

a first data base (63) for storing the information of the specific area where the information distribution service is provided to registered users of the portable mobile information terminals (1,3) is disclosed as “In addition ....data processing station 18 searches a database 32 and associated area storage 63 to process the operator's query .....” and “Area map storage 63 stores area maps with position markers indicating the mobile units and

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landmarks” (see Figure 2 and column 4 lines 48 - 67 and column 5 lines 20 - 22)” This directly reads upon the claim of a first database for storing information of the specific area.

Fan discloses “In addition ....data processing station **18** searches a database **32** and associated area storage **63** to process the operator's query .....Database **32** maintains such travel-related information as maps, traffic situation in a particular area, positions of service stations and destinations of interest.....” and “Services based on the position of a mobile unit can be easily provided in the system described above.....Alternatively, useful information can be supplied by data processing station **18** or another server to mobile unit **1** according to mobile unit **1**'s position. FIG. 14 shows a model for distributing location-relevant information to a mobile unit. As shown in FIG. 14, a “field client” **1401**, such as mobile unit **1**,....., communicates with a network gateway (e.g. wireless network service connection **10**) to access over the Internet 1403 to a server **1404** (e.g., data processing station **18**). Using the methods discussed above, the position of field client **1401** is communicated to server **1404**. Based on this position, server **1404** can provide field client **1401** with information relevant to field client **1401**'s position, either upon request by field client **1401** or on servers **1404**'s own initiative. Such location-relevant information includes advertising of businesses local to field client **1401**'s position.....(see Figures 2, 14 and column 4 lines 48 - 67, column 12 lines 14 - 42), which reads on “a second database (32) for storing prepared information to be distributed and distribution conditions of an information provider for distributing the prepare information”;

Fan further discloses “Position table **33** stores the last known measured positions of the mobile units in the system.....Position table **33** contains the measured position of several

mobile units, identified respectively by an identification number **160**, at particular times **162**. The measured position of each mobile unit is represented by time stamp **162**, a measured latitude value **165**, a measured longitude value **168**, and a velocity **170**” and “Services based on the position of a mobile unit can be easily provided in the system .... Mobile unit **1** can request for information to be supplied based on its position.....” (see Figure 7, 14 and column 5 lines 1 - 10, column 12 lines 14 - 21), which reads on “a third database (**33**) for storing the group which reads on the claimed “registration information” of registered users and the receiving conditions for receiving the distributed information” (see col. 3, lines 10-15; col. 6, lines 19-26; col. 8, lines 19-29; col. 9, lines 37-43; col. 11, lines 35-51), where the system manages registration information of the such as type of user (e.g., group) for distributing related information to the group if the group is a taxi or moving company;

Fan further discloses “Data network **27** can be a wide area data network, such as the Internet, or a telephone network, including wired or wireless communications, or both.....” (see Figure 1 and column 5 line 66 - column 6 lines 18), which reads directly on “means for receiving (**27**) position information from the portable mobile information terminals of said registered users.”

Fan further discloses “FIG. 2 illustrates data processing station **18**....If data processing station **18** receives an outbound data package that includes a measured position of the mobile unit....., the measured position is entered into position table **33** (FIG. **2**). ....” and “In addition to computing the corrected measured position, data processing station **18** searches a database **32** and associated area storage **63** to process the operator's query received in the outbound data package.” and “Area map storage **63** stores area maps with position

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markers indicating the mobile units and landmarks.” (see Figure 2 and column 3 lines 53 - 63, column 4 lines 48 - 51, column 5 lines 20 -22) reads directly on “determining means for determining whether said received position information is located in the specified area stored in said first database 63;”

In addition, Fan discloses “Data network 27 can be a wide area data network, such as the Internet, or a telephone network, including wired or wireless communications.....Service connection 10 can be a commercial transceiver station such as a cellular phone transceiver station...” (see Figure 1 and column 5 line 66 - column 6 line 18) which directly reads on “information distribution means (27) for determining whether the distribution conditions stored in said second database (32) and the receiving conditions of said registered users stored in said third database (33) are satisfied, and distributing the prepared information, to the portable mobile information terminals (1, 3) of said registered users located in the specified area when the distribution conditions and the receiving conditions are satisfied.”

wherein the distribution conditions include a designation of the specified area and at least one of a designated distribution time period, a registered user group which reads on the claimed “category”, registered user interest which reads on the claimed “preferences”, and an information medium type (see col. 1, line 49 - col. 2, line 2; col. 3, lines 1-22; col. 4, lines 55-60; col. 7, lines 13-16; col. 11, lines 13-38; col. 12, lines 28-42; Figs. 1, 12; Figs. 1, 12),.

Regarding **Claim 2**, Fan discloses a server system (Figure 1) as set forth in **claim 1**, further comprising “area determining means (18) for illustrating said specific area using a simple figure, and storing said figure in said first database (63) as area information indicated

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by the latitude and longitude,” which is disclosed by “Upon receiving the outbound data package, data processing station **18** responds to operator's query by searching database **32**, updating a map retrieved from map storage **63**, and transmitting the map to mobile unit **1** an inbound data package” and “Area map storage **63** stores area maps with position markers indicating the mobile units and landmarks....a map including the measured position....and the position of the destination.....” and “Position table **33** stores the last known measured positions of the mobile units....The measured position of each mobile unit is represented by ...., a measured latitude value **165**, a measured longitude value **168**.....” (see Figure 2 and column 7 lines 52 - 56, column 5 lines 20 - 28, column 5 lines 1 - 11).

In addition, Fan discloses “FIG. 2 illustrates data processing station **18** of the present invention, including data process unit **38** which handles computation at data processing station **18**. If data processing station **18** receives an outbound data package that includes a measured position of the mobile unit...., the measured position is entered into position table **33** (FIG. 2). If the outbound data package includes pseudo-ranges, however, data processing station **18** obtains the measured position of the mobile unit for position table **33** by applying a triangulation technique on the pseudo-ranges.” and “In addition to computing the corrected measured position, data processing station **18** searches a database **32** and associated area storage **63** to process the operator's query received in the outbound data package.” and “To formulate the response, the data processing program uses the measured position of the requesting mobile unit and other relevant positional information. The response is returned in an inbound data package to the requesting mobile unit...” (see Figure 2 and column 3 lines 53 - 63, column 4 lines 48 - 51, and column 9 lines 31 - 35) which directly reads on the claim

“wherein said determining means (18) uses the position information received from said portable mobile information terminals (1, 3) for said determination.”

Regarding **Claim 3**, Fan discloses a server system (Figure 1) as described in **claim 1**, wherein said position information received from said portable mobile information terminals (1, 3) is the latitude/longitude information of said portable mobile information terminals (1, 3).” which is disclosed by “Position table **33** stores the last known measured positions of the mobile units....The measured position of each mobile unit is represented by ...., a measured latitude value **165**, a measured longitude value **168**....” (see Figure 7 and column 5 lines 1 - 10).

Regarding **Claim 4**, Fan discloses a server system (Figure 1) as described in **claim 3**, “further comprising area determining means (18) for illustrating said specific area using a simple figure, and storing said figure in said first database (63) as area information indicated by the latitude and longitude;” which is disclosed by “Area map storage **63** stores area maps with position markers indicating the mobile units and landmarks....a map including the measured position.....and the position of the destination.....” and “Position table **33** stores the last known measured positions of the mobile units....The measured position of each mobile unit is represented by ...., a measured latitude value **165**, a measured longitude value **168**....” (see Figure 2 and column 5 lines 20 - 28, column 5 lines 1 - 11).

Fan further discloses “FIG. 2 illustrates data processing station **18** of the present invention, including data process unit **38** which handles computation at data processing station **18**. If data processing station **18** receives an outbound data package that includes a measured position of the mobile unit...., the measured position is entered into position table



**33** (FIG. 2). If the outbound data package includes pseudo-ranges, however, data processing station **18** obtains the measured position of the mobile unit for position table **33** by applying a triangulation technique on the pseudo-ranges.” and “In addition to computing the corrected measured position, data processing station **18** searches a database **32** and associated area storage **63** to process the operator's query received in the outbound data package.” and “To formulate the response, the data processing program uses the measured position of the requesting mobile unit and other relevant positional information. The response is returned in an inbound data package to the requesting mobile unit...” (see Figure 2 and column 3 lines 53 - 63, column 4 lines 48 - 51, and column 9 lines 31 - 35), which directly reads on “wherein said determining means (18) uses said latitude/longitude information received from said portable mobile information terminals (1, 3) for said determination.”

Regarding **Claim 5**, Fan discloses a server system (Figure 1) as described in **claim 3**, “wherein said latitude/longitude information is given by the portable mobile information terminals (1, 3) having a GPS receiver” which is disclosed as “Mobile units **1** and **3** each include a GPS receiver” and “Position table **33** stores the last known measured positions of the mobile units.... The measured position of each mobile unit is represented by ...., a measured latitude value **165**, a measured longitude value **168**....” (see Figure 7 and column 3 lines 2 - 3, column 5 lines 1 - 11).

Regarding **Claim 8**, Fan discloses a server system (Figure 1) as described in **claim 1**, “further comprising registration/canceling/change means for executing, by communication with each of said portable mobile information terminals (1, 3), the registration/canceling procedure for the user registration of the portable mobile information terminal (1, 3) and the

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registration/change procedure for the receiving conditions of said user stored in the said third database (33).” which is disclosed by “As shown in FIG. 14, a “field client” **1401**, such as mobile unit **1**,....., communicates with a network gateway (e.g. wireless network service connection **10**) to access over the Internet **1403** to a server **1404** (e.g., data processing station **18**). Using the methods discussed above, the position of field client **1401** is communicated to server **1404**. Based on this position, server **1404** can provide field client **1401** with information relevant to field client **1401**'s position, either upon request by field client **1401** or on servers **1404**'s own initiative.” and discloses “FIG. 2 illustrates data processing station **18** of the present invention, including data process unit **38** which handles computation at data processing station **18**. If data processing station **18** receives an outbound data package that includes a measured position of the mobile unit....., the measured position is entered into position table **33** (FIG. 2). If the outbound data package includes pseudo-ranges, however, data processing station **18** obtains the measured position of the mobile unit for position table **33** by applying a triangulation technique on the pseudo-ranges.” and “In addition to computing the corrected measured position, data processing station **18** searches a database **32** and associated area storage **63** to process the operator's query received in the outbound data package.” and “Position table **33** stores the last known measured positions of the mobile units... **FIG. 7** represents one implementation of position table **33**. Position table **33** contains the measured position of several mobile units, identified respectively by an identification number **160**, at particular times **162**. The measured position of each mobile unit is represented by ....., a measured latitude value **165**, a measured longitude value **168**.....” (see Figures 2, 7, 14 and column 12 lines 22 - 32, column 3 lines 53 - 63, column 9 lines 31 - 35,

and column 5 lines 1 - 11) The identification number (160) of the mobile unit constitutes the registration of the mobile unit.

Regarding **Claim 9**, Fan discloses a server system (Figure 1) as described in **claim 1**, “further comprising “receiving means (27) for receiving the prepared information and the distribution conditions of the information provider, and for storing the prepared information and the distribution conditions in said second database (32).” which is disclosed by “In addition to computing the corrected measured position, data processing station **18** searches a database **32** and associated area storage **63** ....Database **32** maintains such travel-related information as maps, traffic situation in a particular area, positions of service stations and destinations of interest....Data processing unit **38** accesses database **32**” and “As shown in FIG. **14**, a “field client” **1401**, such as mobile unit **1**,....., communicates with a network gateway (e.g. wireless network service connection **10**) to access over the Internet **1403** to a server **1404** (e.g., data processing station **18**). Using the methods discussed above, the position of field client **1401** is communicated to server **1404**. Based on this position, server **1404** can provide field client **1401** with information relevant to field client **1401**'s position, either upon request by field client **1401** or on servers **1404**'s own initiative. Such location-relevant information includes advertising of businesses local to field client **1404**'s position, discount coupons to be used at local businesses, schedule of events of local interest, tourist information.....In addition, even on a global inquiry of a merchandise or service, server **1404** can provide client **1401** responsive information relevant to the client **1401**'s location. For example, a request for a hair dresser should return a list of hair dressers within local

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reach and not across the continent.” (see Figures 2, 14 and column 4 lines 48 - 67, column 12 lines 22 - 42).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 6, 7** are rejected under 35 U.S.C. 103(a) as being unpatentable over Fan et al.

(hereinafter Fan) (US 6,529,159 B1) in view of Kawamoto (US 6,584,320 B1).

Regarding **Claim 6**, Fan discloses a server system (Figure 1) as described in **claim 1** (see **claim 1**). Fan discloses the use of base stations in the data network (27) as disclosed “Service connection 10 can be a commercial transceiver station such as a cellular phone transceiver station...” (see Figure 1 and column 6 lines 14 - 18) However, Fan fails to specifically disclose “said position information received from said portable mobile information terminals is the information on the base station of a radio area where each of said portable mobile information terminals is existent.” However, the determination of position location based on the position of the base station located in the mobile information terminals area was well known in the art, as taught by Kawamoto.

In the same field of endeavor, Kawamoto discloses the use of a base station to determine the position location of a mobile terminal, “In PHS, as shown in FIG. 5, base stations 21 are disposed on every cover area having a radius of about 100 m. Each of base

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stations **21** transmit/receives radio waves to and from portable remote terminal **20** situated in the relevant cover area and conducts communication therewith. Accordingly, when a portable remote terminal **20** forms a communication link with a predetermined base station **21**, it can be assumed that portable remote terminal **20** situates within the cover area of the above-mentioned base station **21**. Then as shown in FIG. 6, if correspondence between the ID number for each of base stations (identification for identifying the base station) and a cover area are (position) thereof is previously stored as a table in RAM **113** of server **25**, server **25** can detect, when receiving the ID number of the base station from portable remote terminal **20**, can detect the cover area (present position for portable remote terminal **20**) based on the ID number. For instance, in the example shown in FIG. 6, assuming the ID number for base station **21** as **0002**, it can be judged that portable remote terminal **20** situates within a range of North latitude.....and of East longitude.....“ (see Figures 5, 6 and column 5 line 57 - column 6 line 11)

Therefore, it would have been obvious to one skilled in the art at the time the invention was made to modify Fan, with its server system and its base stations, with the capability of determining the position of the portable remote terminal based on the ID of the mobile's corresponding base station, for the purpose of adding a means for determining the position of remote terminals lacking a GPS receiver.

Regarding **Claim 7**, Fan and Kawamoto, disclose everything claimed as applied above (see **claims 6 and 2**).

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**Claim 10** is rejected under 35 U.S.C. 103(a) as being unpatentable over Fan et al. (hereinafter Fan) (US 6,529,159 B1) in view of Sheynblat et al. (hereinafter Sheynblat) (US 6,677,894 B2).

Regarding **Claim 10**, Fan discloses a server system (Figure 1) as described in **claim 1** which discloses a means for receiving the response of a registered user to the distributed information. (see **claim 1**). However, Fan fails to specifically disclose “recording and statistically processing said response, and managing and maintaining the result of said process.” However, recording and statistically processing said response, and managing and maintaining the result of said process was well known in the art, as taught by Sheynblat.

In the same field of endeavor, Sheynblat discloses recording and statistically processing said response, and managing and maintaining the result of said process, “In addition....location-based information shown above in Table 1, may be provided to mobile GPS receivers and/or other clients by the Web server **118**, which is shown coupled to the communication network **112**.....” and “In one embodiment, the Web server **118**.....may use the location of the mobile GPS receiver to derive representations (e.g. charts, graphs, etc.) of cellular use demographics, such as time and place of calls, location-based and/or time-based distributions, etc., which representations and data may be provided to cellular carriers.....government agencies, Web users, etc. Furthermore, the Web server **118** may display (e.g., on a map) the location of various mobile GPS clients .....Such information may be useful for advertising, customer/user profiles, location-targeted marketing, location based billing, etc.....” (see Table 1 and column 19, lines 30 - 50; column 20, lines 15 - 31)

Therefore, it would have been obvious to one skilled in the art at the time the invention was made to modify Fan, with its server system and web access, with the capability of recording and statistically processing said response, and managing and maintaining the result of said process, for the purpose of target marketing of location based information.

***Response to Arguments***

4. Applicant's arguments with respect to claims 1-10 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Willie J. Daniel, Jr. whose telephone number is (703) 305-8636. The examiner can normally be reached on 7:30-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha D. Banks-Harold can be reached on (703) 305-4379. The fax phone



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number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*Marsha D Banks-Harold*

MARSHA D. BANKS-HAROLD  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600

WJD,JR  
21 September 2004